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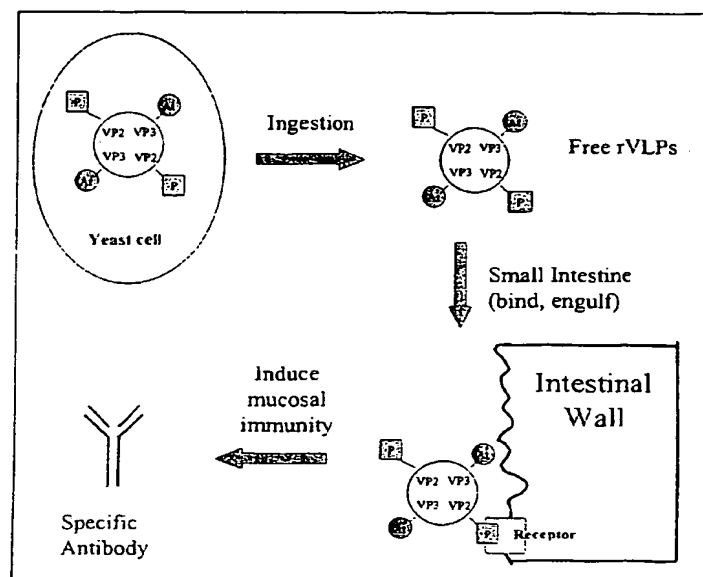
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(54) Title: VIRUSES AND VIRUS-LIKE PARTICLES FOR MULTIPLE ANTIGEN AND TARGET DISPLAY



(57) Abstract: The present invention relates to the display of antigenic or allergenic components along with a tissue-targeting component on viruses or virus-like particles. Capsid protein genes are recombinantly modified to contain the specified components, then expressed within a host organism, such as yeasts, bacteria, or algae, and allowed to spontaneously form active virus particles or virus-like particles. The recombinant complexes (virus or virus-like particle) can then be purified or used in situ as a therapeutic tool for disease or allergy prevention. The expression of multivalent and multifunctional components to increase the immunogenicity of the recombinant complexes, especially on oral administration, is provided.